

BRCS350P04DP

Rev.B Oct.-2024

5 é / Descriptions

TO-252 .> // x 6 ?ú 3 « | • 'ož

P-CHANNEL MOSFET in a TO-252 Plastic Package.

¤ ª / Features

$V_{DS} (V) = -40V$ $I_D = -27.5 A$ ($V_{GS} = f 20V$)

$R_{DS(ON)}@10V 0.35mR$ (Typ.33mR)

$R_{DS(ON)}@4.5V 0.60mR$ (Typ.40mR)

—)í D } ÄHF Product.

Ð ÷ / Applications

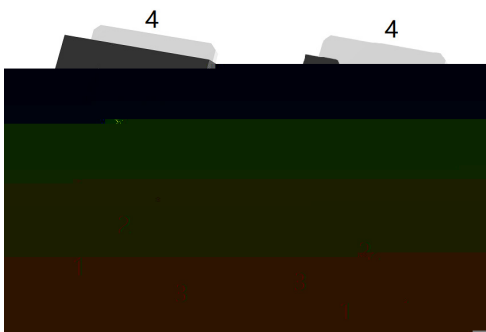
9 z 9 è ò y V ñ è o • *) *) ô E o • Ž ` " D } › ä | ô E o ž

Suited for low voltage applications such as automotive, DC/DC Converters, and high efficiency switching for power management in portable and battery operated products.

Ã W] Ô . / Equivalent Circuit



• Ū - æ / Pinning



PIN 1 y G

PIN 2 y D

PIN 3 y S

PIN 4 y D

, M V / Marking

• - ~ ª ¢ o ž

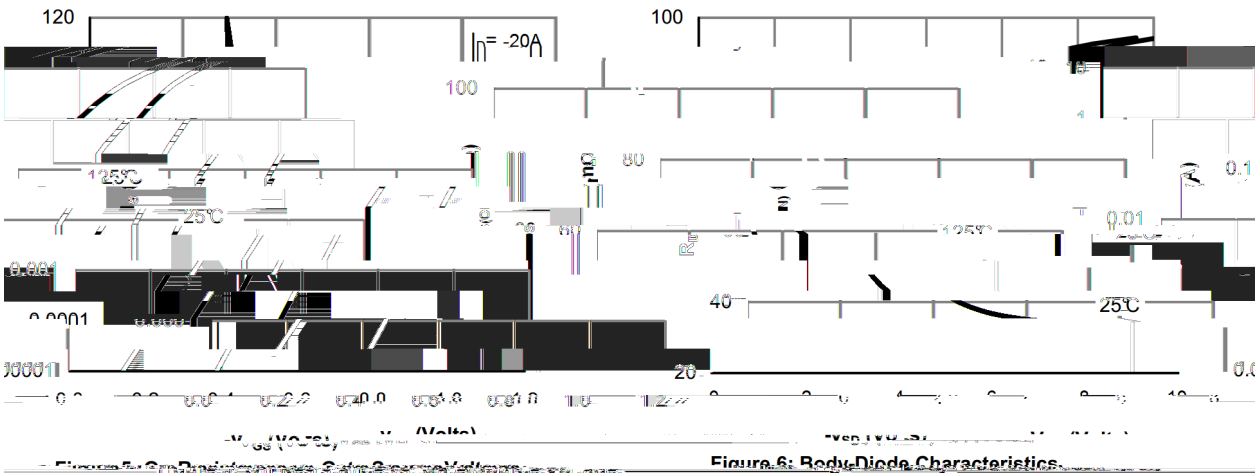
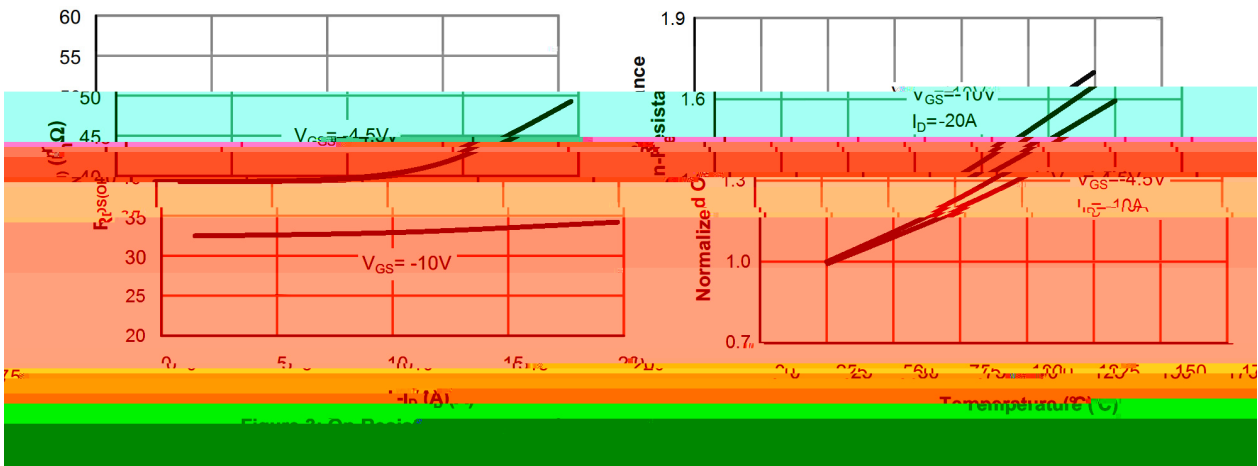
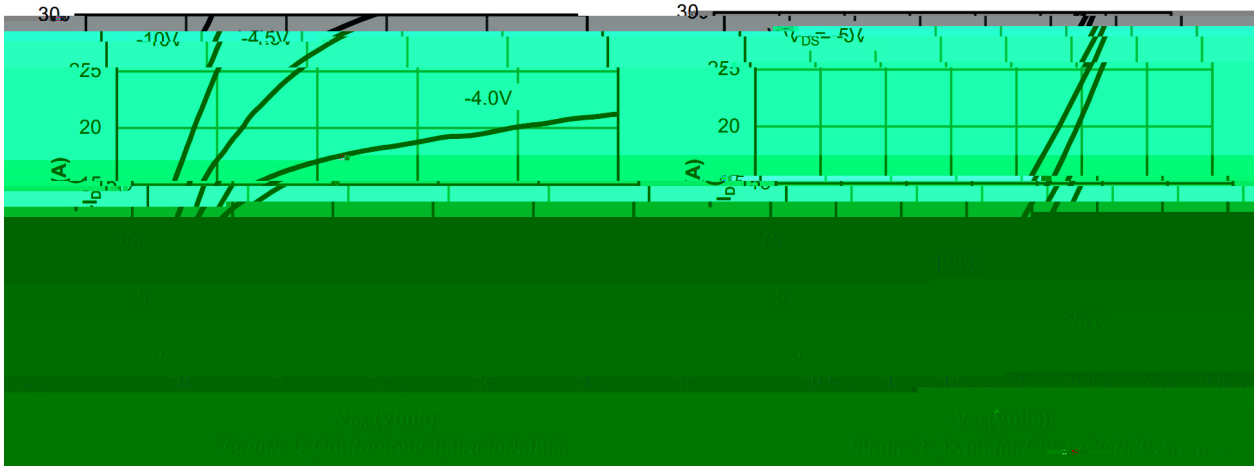
See Marking Instructions.

@ f Parameter	... Z Symbol	f › Rating	% y Unit
Drain-Source Voltage	V _{DSS}	-40	V
Drain Current	I _D (T _c =25)	-27.5	A
Drain Current - Pulsed	I _{DM}	-87	A
Gate-Source Voltage	V _{GS}	±20	V
Avalanche Current	I _{AS}	13	A
Single Pulsed Avalanche Energy $\Delta L=0.5\text{mH}$ Δ	E _{AS}	54	Pow

-1Dissip4

@ f Parameter	... Z Symbol	y i Ú ^ Test Conditions	Â 4 › Min	Á ° › Typ	Â Ý › Max	% y Unit
Turn-On Delay Time	t _{d(on)}	V _{GS} =-10V V _{DS} =-20V R _L =1.6 j R _{GEN} =3				

Electrical Characteristic Curve



Electrical Characteristic Curve

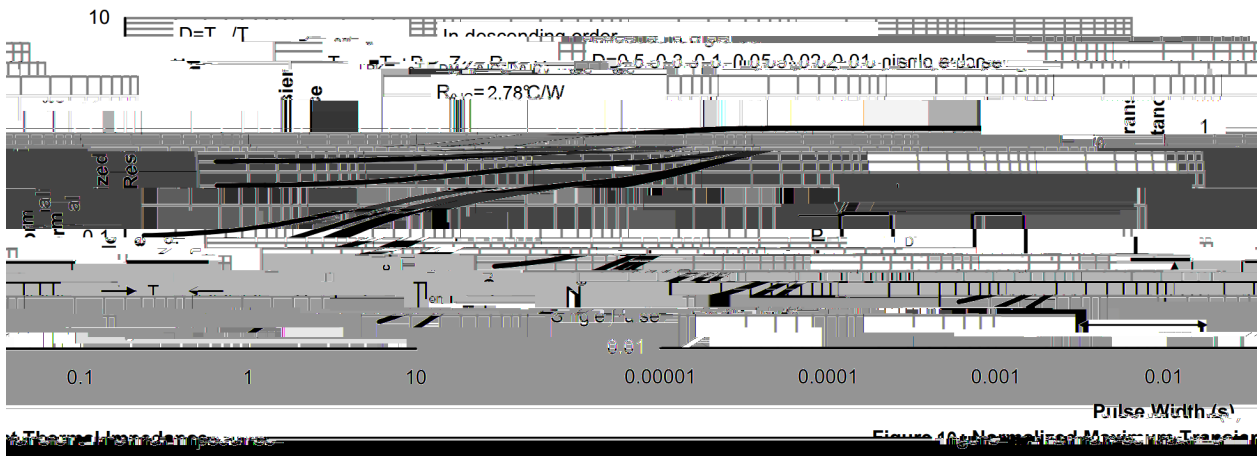
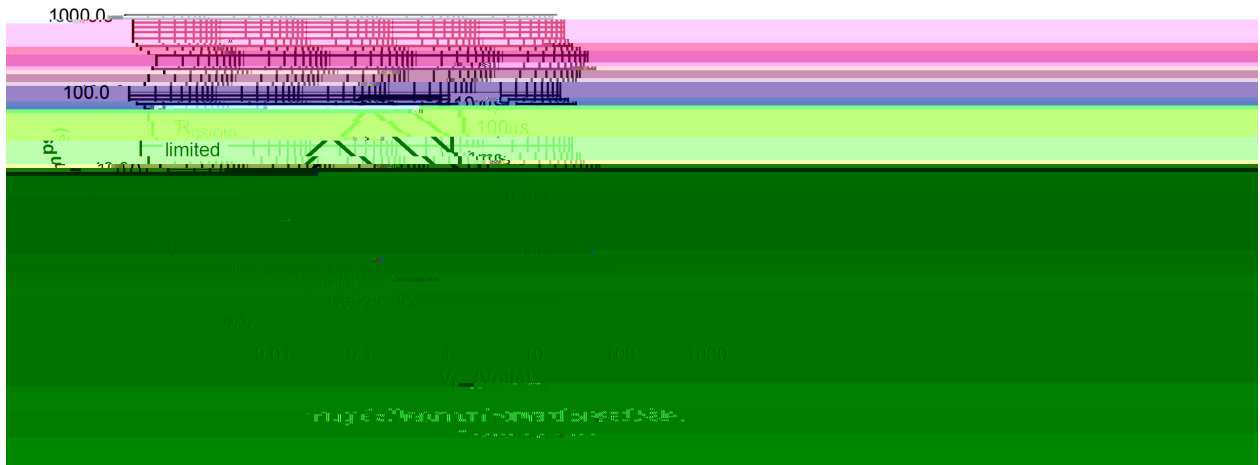
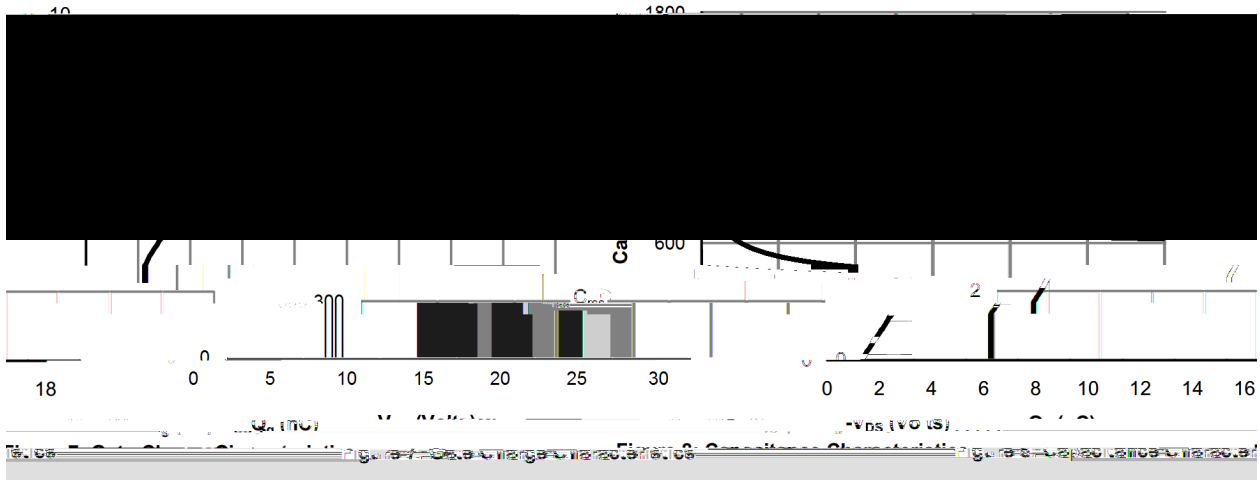


Figure 40: Normalized Maximum Transient Thermal Impedance

Ø □ =) φ / Package Dimensions

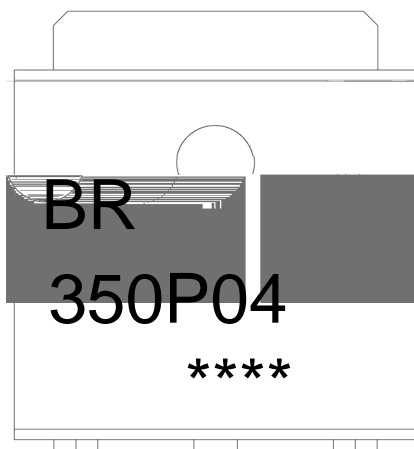


单位: mm

Symbol	Min	Max	Symbol	Min
A	2.30	2.40	E	5.95
B	0.50	0.55	F	4.75
C	0.45	0.55	G	9.45
D	5.16	5.50	H	0.00
I	0.66	0.80	J	0.35
K	0.66	0.80	L	0.35
M	0.66	0.80	N	0.35
O	0.66	0.80	P	0.35
Q	0.66	0.80	R	0.35
S	0.66	0.80	T	0.35
U	0.66	0.80	V	0.35
W	0.66	0.80	X	0.35
X	0.66	0.80	Y	0.35
Y	0.66	0.80	Z	0.35

12-252

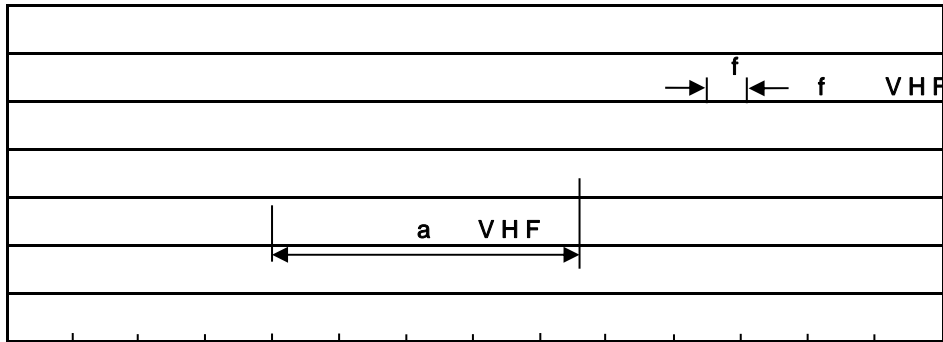
, M y f / Marking Instructions



^a ç y
BR y , [W A
350P04 y ° Z W A
 y ÿ D Z W A k š ÿ D Z J

Note:
BR: Company Code
350P04: Product Type Code
****: Lot No. Code, code change with Lot No

šWD t...•Žç (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6



^açy

- 1o• Ä ½ “ † 150 ½180 - k ž • 60 ½90sec;
- 2o• Q › “ † 245 r5 - k ž • 4 Ò 5 r0.5sec;
- 3o•D N ò i Ò 0 , † 2 ½10 - /sec.

Note:

- 1.Preheating:150~180 - , Time:60~90sec.
- 2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.
- 3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ~ »] / Resistance to Soldering Heat Test Conditions

“ † y 260 r5 - ž • y 10 r1 sec. Temp.:260±5 Time:10±1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type 7>û ~ E	Units ;>û iH					Dimension ;>û p . (unit Åmm ³)		
	Units/Reel / - -	Reels/Inner Box - - / -	Units/Inner Box / -	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Reel	Inner Box	Outer Boxç
TO-252	2,500	2	5,000	6	30,000	13 s x16	360x360x50	380x335x366

ì ' x / TUBE

Package Type 7>û ~ E	Units ;>û iH					Dimension ;>û p . (unit Åmm ³)		
	Units/Tube /•1x	Tubes/Inner Box •1x / -	Units/Inner Box / -	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Tube•1x	Inner Box	Outer Boxç
TO-251/252	75	48	3,600	5	18,000	526x20.5x5.25	555x164x50	575x290x180

„ Æ y f / Notices